

Preface

This volume is dedicated to Dr J S G (Jim) McCulloch. It explores progress in hydrology, particularly catchment science and physical processes, over the past three decades in celebration of the work of the UK's Institute of Hydrology (IH) and its many friends and associates all over the world. The title of this volume recalls the debate which established the rationale for a major investment of public funds in stimulating growth of hydrology as an integrated science. The Symposium, "A View from the Watershed", was held in 1973 on the occasion of the formal opening of the new building of the IH at Wallingford. Presentations then by the great and the good in hydrology, Howard Penman, Charles Pereira, Marshall Nixon and Eamon Nash, testify to the perception of the status of hydrology in 1973 as a science in the UK. The McCulloch Symposium in Vienna in 2006 and this Special Issue are entitled "A View from the Watershed Revisited". The present volume includes, as a preamble, the papers given in 1973 as a yardstick against which the presentations published here can be judged in assessing the progress in the science in the years between.

Jim McCulloch was the founding Director of the Institute of Hydrology (IH), part of the UK Natural Environment Research Council (NERC) and served from 1964–1987. He tells the story of this development in his paper in this volume "All our yesterdays – a hydrological retrospective". The IH reputation for excellence came about because Jim saw clearly where there existed potential for research development and he persuaded others of the need for funding to get the research underway. He gave his staff, who were all chosen for their vision, motivation and above all, enthusiasm for research, freedom to develop their research interests, under the lightest of constraints. Under his leadership, IH grew from its tiny beginning as the Hydrological Research Unit (HRU) to become a centre of

excellence, admired by hydrological researchers in many countries as a pattern to be followed, and even envied by some who regretted that their own countries had not followed a similar path. His commitment to the international growth of hydrology and development in universities was demonstrated by his instigating many collaborations, exchanges and partnerships. With long-sightedness, Jim also provided a home at Wallingford from which the International Association for Hydrological Sciences (IAHS) could produce its range of publications, at a time when his superiors saw little justification for it. His friends and colleagues, who have contributed to this volume, celebrate Jim as a scientist, research institute director and educator of young researchers.

Subsequently, Jim continued to encourage hydrologists and to promote their work by acting as a Managing Editor of the Elsevier "Journal of Hydrology" (1983-1996) and by founding, in 1997, the new European Geophysical Society journal "Hydrology and Earth Systems Sciences" (HESS).

Some of the papers in this volume were presented by devoted colleagues to the McCulloch Symposium entitled "A View from the Watershed Revisited" convened by Professors Enda O'Connell and Philip O'Kane on 4 April 2006 during the General Assembly of the European Geosciences Union in Vienna. To these have been added specially commissioned papers from other researchers who have been influenced directly or indirectly by Jim's endeavours. The topics covered – ranging from individual hydrological processes to catchment-scale phenomena to human influences – reflect accurately the wide range of Jim McCulloch's interests and contributions to hydrology as a significant sector in geophysics as a science. The volume concludes with our views on contemporary and future perspectives for the hydrological and catchment sciences.

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